



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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March 9, 1987

TO: File

FROM: James S. Leatherwood *JSL*

RE: Review of February 23, 1987 Submittal, Ziegler Chemical and Mineral Corporation, ACT/047/008, Uintah County, Utah

The February 23, 1987 supplement to the July 6, 1986 mine plan has been reviewed. Several deficiencies are evident with the mine plan. The plan still lacks concise reclamation and soil management operational details. But the operator has committed to work with the Division at the time reclamation. The following concerns must be addressed.

Rule M-10(14) Reclamation Standards: Soils - JSL

The operator has submitted a small base of soil data relative to the Ziegler Gilsonite Operations. However, the soil sample locations are confusing. The Division previously requested data from both the disturbed and undisturbed soils at each mine site. Please identify each sample location on the Surface Facility map (Exhibit A-1) and identify as undisturbed soils or disturbed soils.

Exhibit C8 states that the soils in the undisturbed areas are much the same as those found in the disturbed areas. On page 14, response to UMC-10(14) Soils, Redistribution, states that the topsoil does not need to be redistributed because the impacted soil contains more silt which "is consequently a better growth medium for revegetation". The submittal soil data does not support either of these two statements.

It is advisable to delete the language pertaining percent silt to vegetation success unless otherwise substantiated through specific research studies. The disturbed soils can be compared with undisturbed soils through a detailed physio-chemical analysis as outlined in the previous comment Rule M-10(14) Soils, Fertility. This information would not

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necessarily provide proof of revegetation potential. The information would only be a foundation to develop a higher probability of revegetation success through sound agronomic management.

On page 13, response to Rule M-10(14) - Soils, Storage, states that the mining methodology does not include the removal of topsoil. Inasmuch that topsoil has not been removed from many of the previous disturbances, the question as to topsoil redistribution is nullified. However, if and when the operator pursues to impact future acreage, Rule M-10(14) Soils, must be complied with in its entirety; specifically, the removal, storage and redistribution of all surficial materials suitable as a growth medium.

djh
cc: S. Linner
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